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IN THE SPECIFICATION

Please replace the Abstract of the Disclosure with the following replacement Abstract of the Disclosure:

Disclosed is an optical component producing apparatus for forming a multi-layer film, which is composed of alternately stacked layers different in optical characteristic, on a base. The apparatus includes film-formation-means for forming the multi-layer film on-the base; measurement means for measuring an optical-characteristic of the optical component obtained by forming the multi-layer film on the base; and control means for controlling a thickness of a portion of the multi layer film formed by the film formation means on the basis of the measured optical characteristic of the optical component. A method for forming an optical component includes (i) depositing optical layers on a base, and (ii) controlling a thickness of a tuning layer by (a) depositing the tuning layer on the optical layers, (b) measuring a first optical characteristic, (c) measuring a second optical characteristic after continued deposition of the tuning layer, (d) determining whether the second optical characteristic has decreased compared to the first optical characteristic, (e) when the second optical characteristic has not decreased, continuing deposition of the tuning layer and returning to steps (ii)(b)-(e), when the second optical characteristic has decreased, terminating the depositing and removing a portion of the tuning layer formed during a period of time defined from when an increase/decrease of the second optical characteristic is stopped to when the second optical characteristic is changed to be decreased, and (f) adding a layer of a lower refractive index on the tuning layer.